GDF15 induces immunosuppression via CD48 on regulatory T cells in hepatocellular carcinoma

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In Brief
Growth differentiation factor 15 (GDF15) negatively regulates antitumor immunity by promoting Treg cells in hepatocellular carcinoma (HCC). It promotes the generation of peripherally derived inducible Treg (iTreg) cells and enhances the suppressive function of natural Treg (nTreg) cells by interacting with CD48 on T cells and thus downregulates STUB1, an E3 ligase that mediates FOXP3 degradation. GDF15 neutralizing antibody effectively eradicates HCC and augments the antitumor immunity in mouse.